

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020924\
 Data File : VL041062.D
 Acq On : 9 Feb 2024 17:44
 Operator : SY/MD
 Sample : P1420-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2R

Quant Time: Feb 12 00:49:04 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL012324AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Mon Feb 12 00:40:04 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

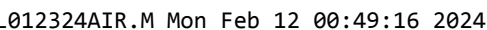
Internal Standards						
1) Bromochloromethane	5.189	49	1086268	10.000	ppbv	0.01
33) 1,4-Difluorobenzene	6.648	114	2847311	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.462	117	2474636	10.000	ppbv	0.00

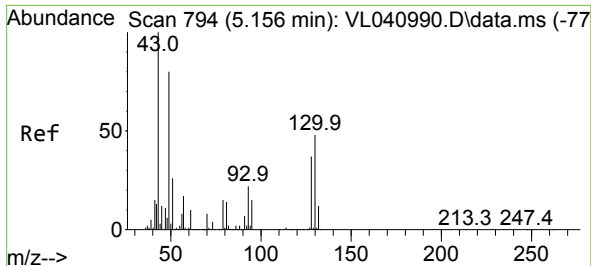
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.773	95	1921102	10.278	ppbv	0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.800%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.726	85	104894	0.437	ppbv	97
3) Chlorodifluoromethane	2.671	51	69202	0.379	ppbv #	87
4) Chloromethane	2.806	50	36666	0.535	ppbv	91
9) Propene	2.867	41	93397	1.558	ppbv	95
11) Trichlorofluoromethane	3.562	101	40846	0.211	ppbv	84
12) 1,1,2-Trichlorotrifluo...	4.063	101	4839	0.035	ppbv #	25
13) Ethanol	3.240	45	6745339	472.274	ppbv	94
15) Acetone	3.465	43	1060163	7.632	ppbv	95
16) 1,3-Butadiene	2.964	39	9764	0.147	ppbv #	10
17) tert-Butyl alcohol	3.890	59	26014	0.228	ppbv #	93
19) Isopropyl Alcohol	3.581	45	1219872	15.171	ppbv	99
20) Methylene Chloride	3.928	84	1919041	35.901	ppbv	96
23) Vinyl Acetate	4.632	43	2957	0.021	ppbv #	1
25) Ethyl Acetate	5.211	43	1192774	4.735	ppbv #	77
26) Hexane	5.211	57	1671614	15.570	ppbv #	39
29) Chloroform	5.266	83	39402	0.207	ppbv	97
30) Cyclohexane	6.594	84	4749	0.053	ppbv #	1
34) 2-Butanone	4.783	43	30225	0.223	ppbv	92
35) Carbon Tetrachloride	6.484	117	3998	0.021	ppbv #	52
36) Benzene	6.365	78	55493	0.236	ppbv #	90
39) 1,2-Dichloropropane	6.651	63	691571	7.465	ppbv #	24
41) Tetrahydrofuran	5.259	42	6891	0.075	ppbv #	38
44) 2,2,4-Trimethylpentane	7.317	57	25251	0.064	ppbv #	52
52) Tetrachloroethene	10.606	164	1979	0.025	ppbv #	71
53) Toluene	9.217	91	69809	0.271	ppbv	99
58) Ethyl Benzene	12.375	91	33965	0.102	ppbv	94
59) m/p-Xylene	12.365	91	36098	0.125	ppbv #	32
60) o-Xylene	13.053	91	6610	0.024	ppbv #	43

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quant Time: Feb 12 00:49:04 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL012324AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Mon Feb 12 00:40:04 2024
Response via : Initial Calibration

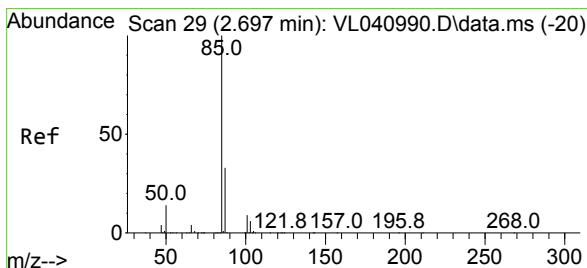
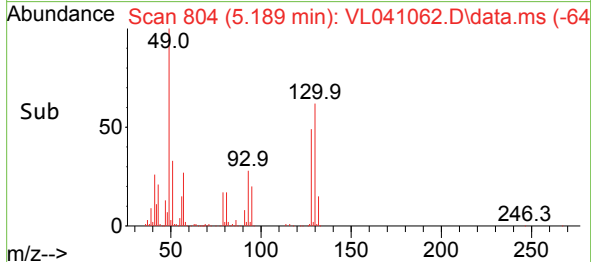
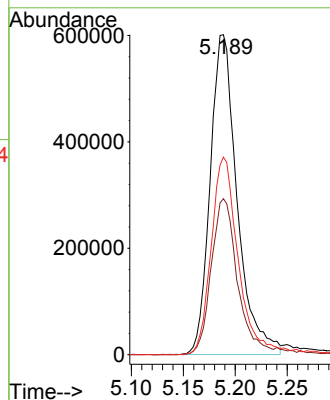
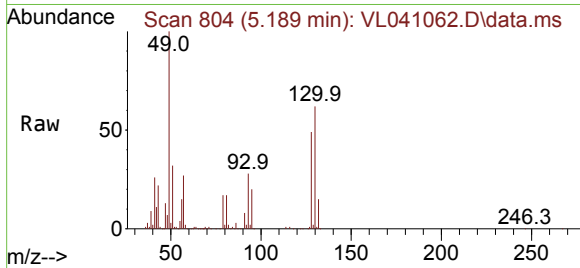




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.189 min Scan# 80
 Delta R.T. 0.013 min
 Lab File: VL041062.D
 Acq: 9 Feb 2024 17:44

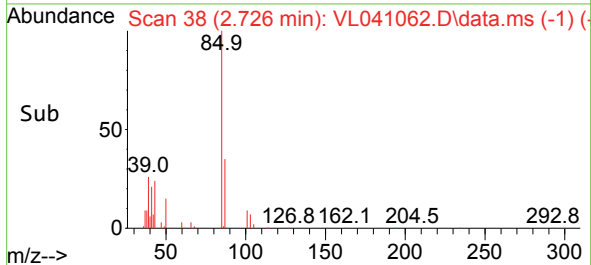
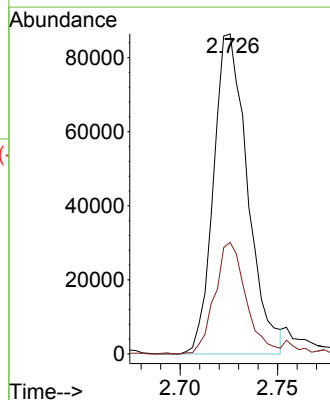
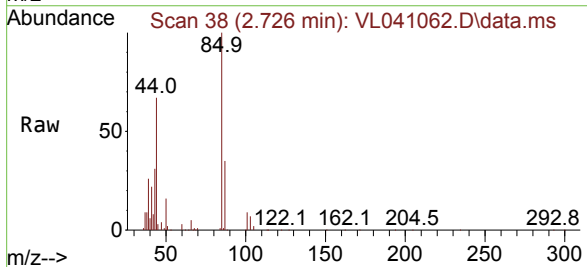
Instrument :
 MSVOA_L
 ClientSampleId :
 IA2R

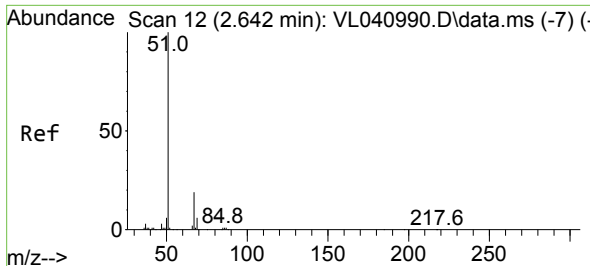
Tgt Ion: 49 Resp: 1086268
 Ion Ratio Lower Upper
 49 100
 128 50.0 23.9 71.7
 130 63.8 31.1 93.5



#2
 Dichlorodifluoromethane
 Concen: 0.437 ppbv
 RT: 2.726 min Scan# 38
 Delta R.T. 0.010 min
 Lab File: VL041062.D
 Acq: 9 Feb 2024 17:44

Tgt Ion: 85 Resp: 104894
 Ion Ratio Lower Upper
 85 100
 87 34.9 26.3 39.5

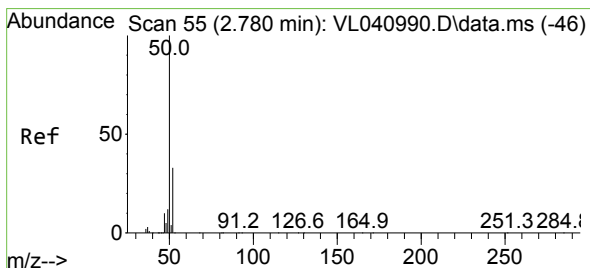
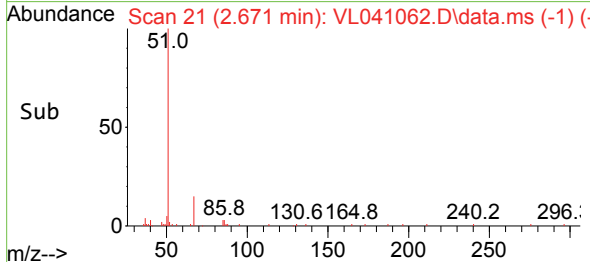
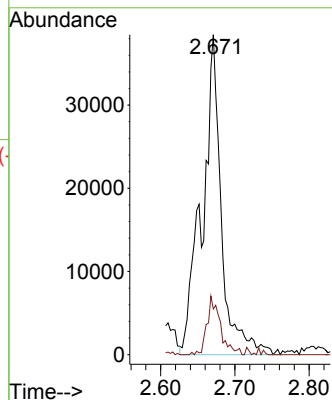
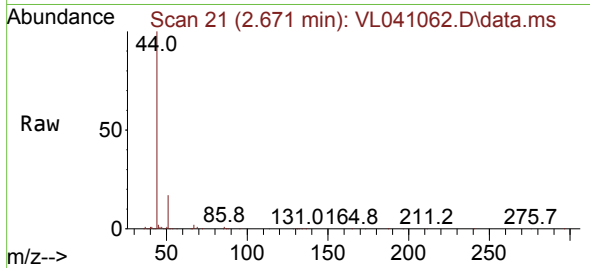




#3
Chlorodifluoromethane
Concen: 0.379 ppbv
RT: 2.671 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

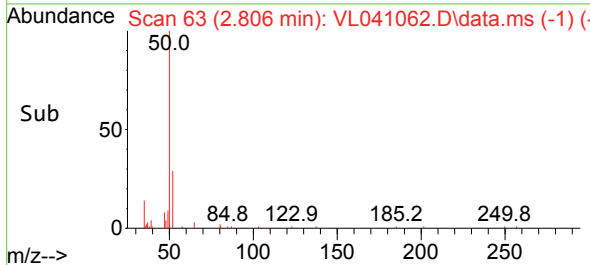
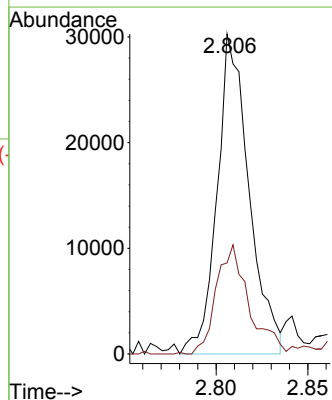
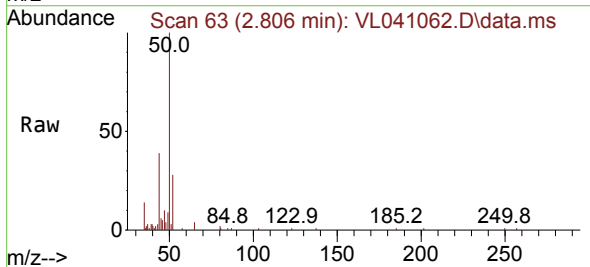
Instrument :
MSVOA_L
ClientSampleId :
IA2R

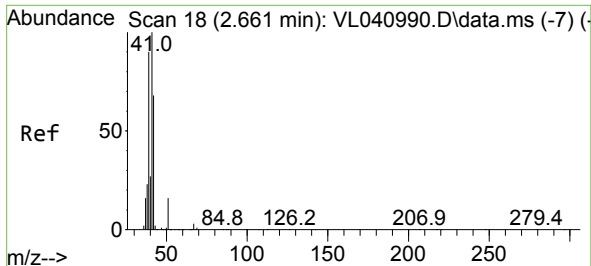
Tgt Ion: 51 Resp: 69202
Ion Ratio Lower Upper
51 100
67 12.6 14.8 22.2#



#4
Chloromethane
Concen: 0.535 ppbv
RT: 2.806 min Scan# 63
Delta R.T. 0.010 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

Tgt Ion: 50 Resp: 36666
Ion Ratio Lower Upper
50 100
52 27.9 26.2 39.4

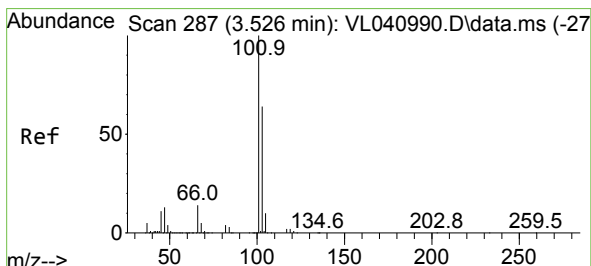
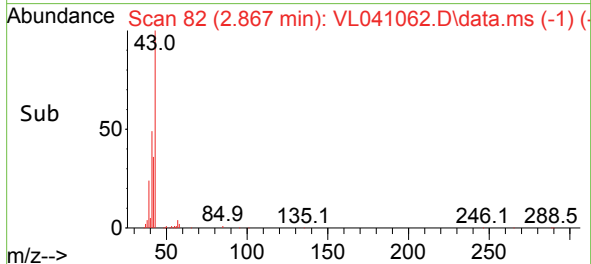
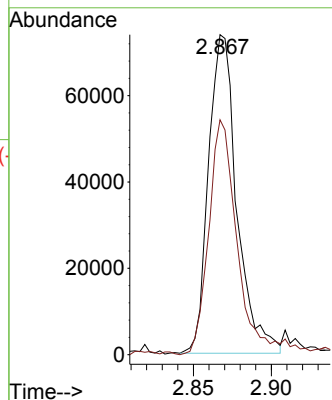
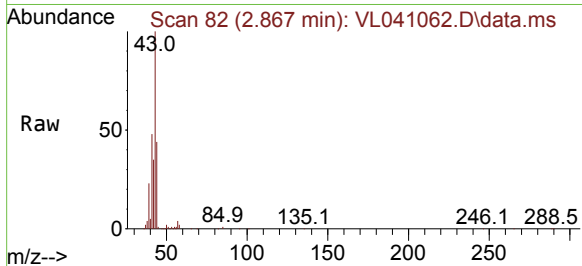




#9
Propene
Concen: 1.558 ppbv
RT: 2.867 min Scan# 81
Delta R.T. 0.190 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

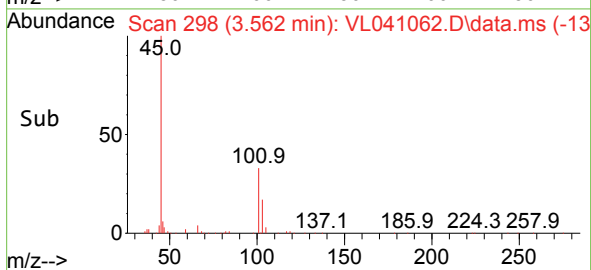
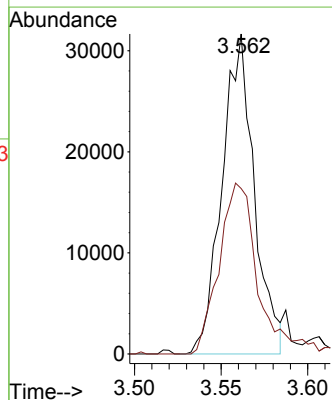
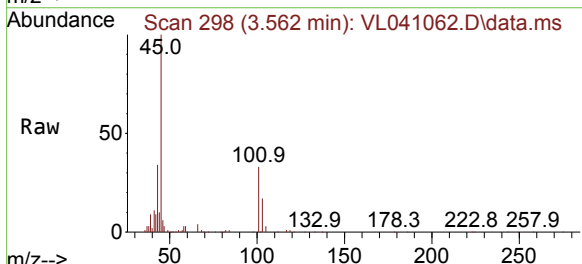
Instrument :
MSVOA_L
ClientSampleId :
IA2R

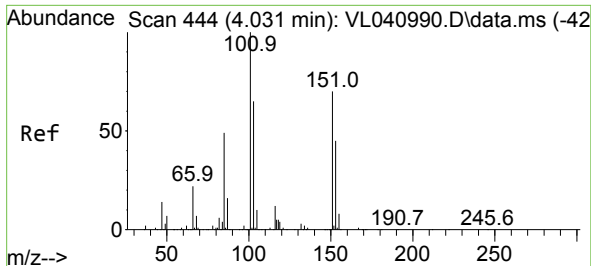
Tgt Ion: 41 Resp: 93397
Ion Ratio Lower Upper
41 100
42 78.1 59.0 88.4



#11
Trichlorofluoromethane
Concen: 0.211 ppbv
RT: 3.562 min Scan# 298
Delta R.T. 0.013 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

Tgt Ion:101 Resp: 40846
Ion Ratio Lower Upper
101 100
103 51.7 51.4 77.2





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.035 ppbv

RT: 4.063 min Scan# 4

Delta R.T. 0.010 min

Lab File: VL041062.D

Acq: 9 Feb 2024 17:44

Instrument :

MSVOA_L

ClientSampleId :

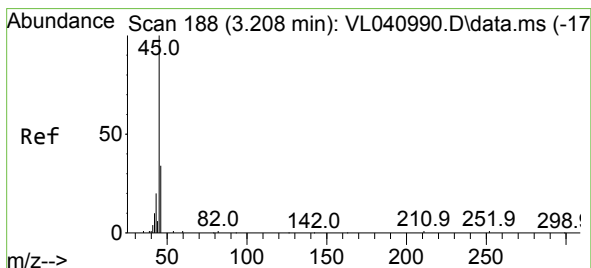
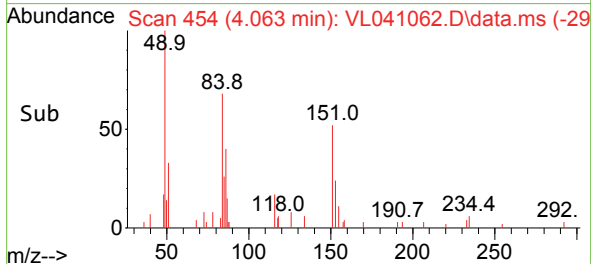
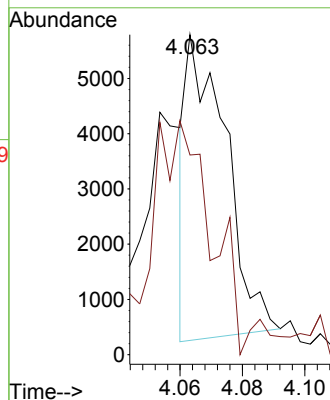
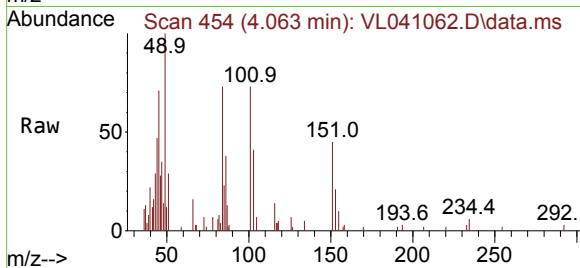
IA2R

Tgt Ion:101 Resp: 4839

Ion Ratio Lower Upper

101 100

151 133.1 56.6 85.0#



#13

Ethanol

Concen: 472.274 ppbv

RT: 3.240 min Scan# 198

Delta R.T. 0.016 min

Lab File: VL041062.D

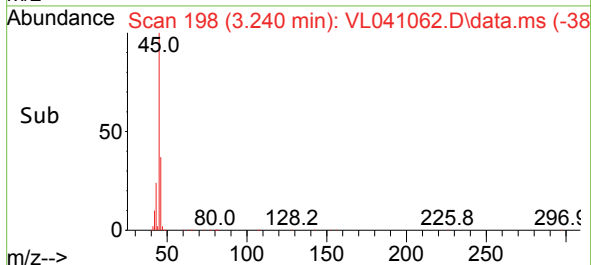
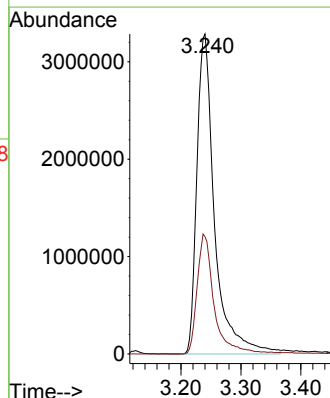
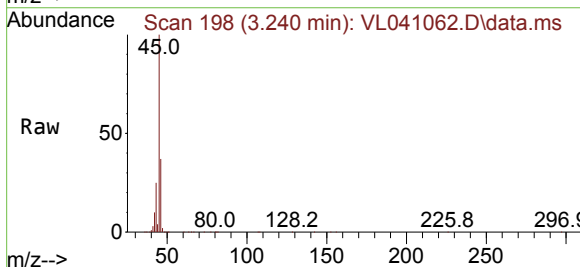
Acq: 9 Feb 2024 17:44

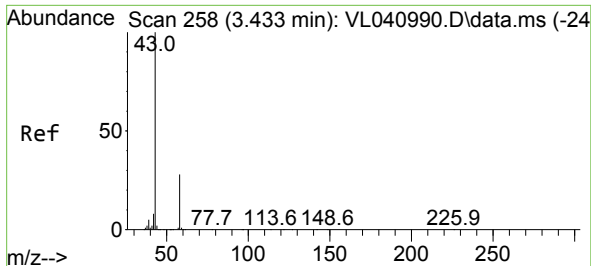
Tgt Ion: 45 Resp: 6745339

Ion Ratio Lower Upper

45 100

46 37.0 16.2 64.8





#15

Acetone

Concen: 7.632 ppbv

RT: 3.465 min Scan# 2

Delta R.T. 0.013 min

Lab File: VL041062.D

Acq: 9 Feb 2024 17:44

Instrument :

MSVOA_L

ClientSampleId :

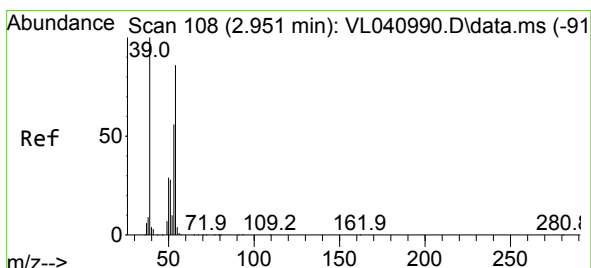
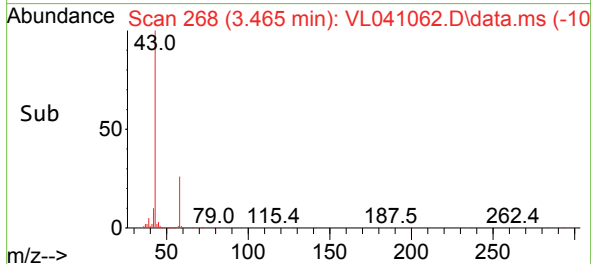
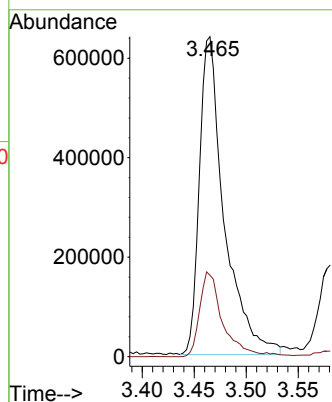
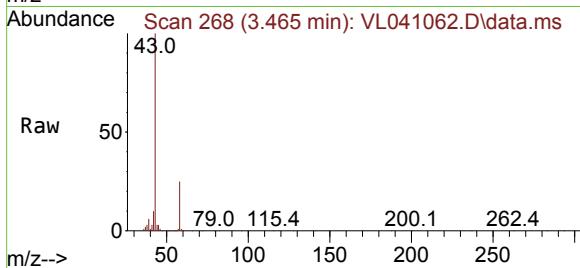
IA2R

Tgt Ion: 43 Resp: 1060163

Ion Ratio Lower Upper

43 100

58 25.1 22.2 33.2



#16

1,3-Butadiene

Concen: 0.147 ppbv

RT: 2.964 min Scan# 112

Delta R.T. -0.007 min

Lab File: VL041062.D

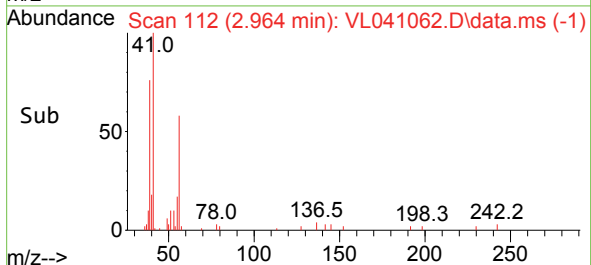
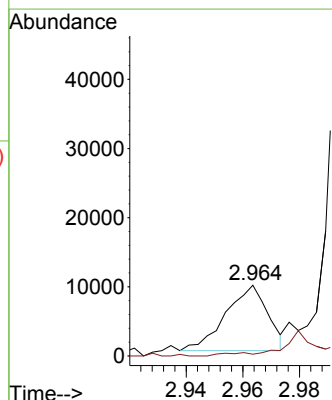
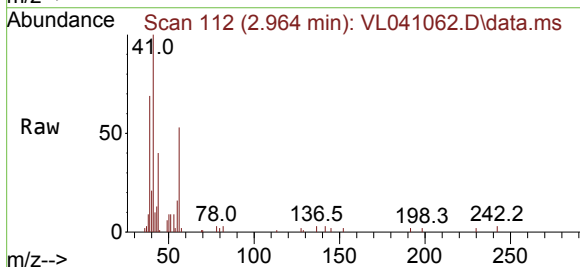
Acq: 9 Feb 2024 17:44

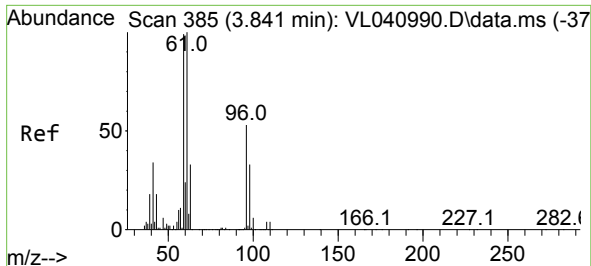
Tgt Ion: 39 Resp: 9764

Ion Ratio Lower Upper

39 100

54 0.0 62.7 94.1#





#17

tert-Butyl alcohol

Concen: 0.228 ppbv

RT: 3.890 min Scan# 40

Delta R.T. 0.026 min

Lab File: VL041062.D

Acq: 9 Feb 2024 17:44

Instrument :

MSVOA_L

ClientSampleId :

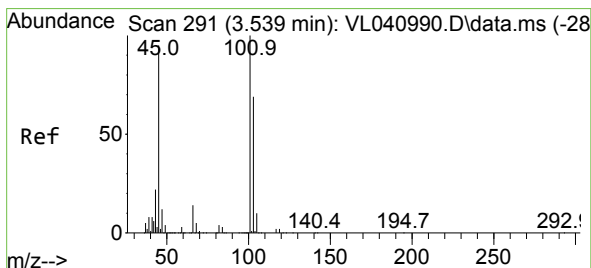
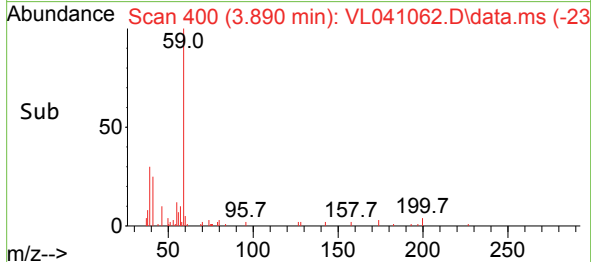
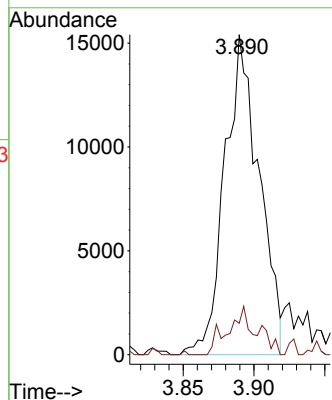
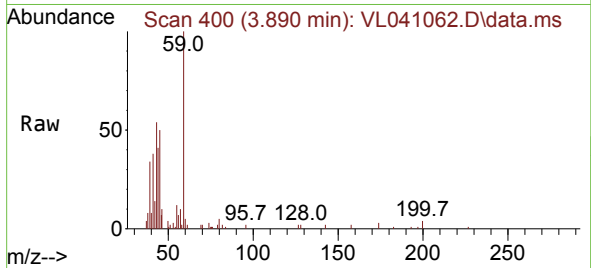
IA2R

Tgt Ion: 59 Resp: 26014

Ion Ratio Lower Upper

59 100

57 13.5 8.7 13.1#



#19

Isopropyl Alcohol

Concen: 15.171 ppbv

RT: 3.581 min Scan# 304

Delta R.T. 0.019 min

Lab File: VL041062.D

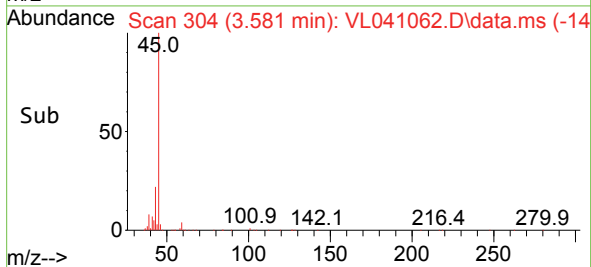
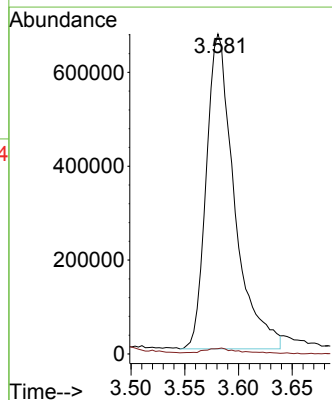
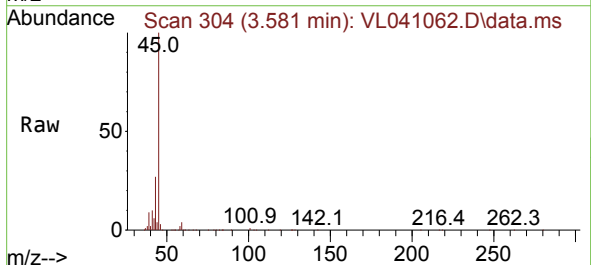
Acq: 9 Feb 2024 17:44

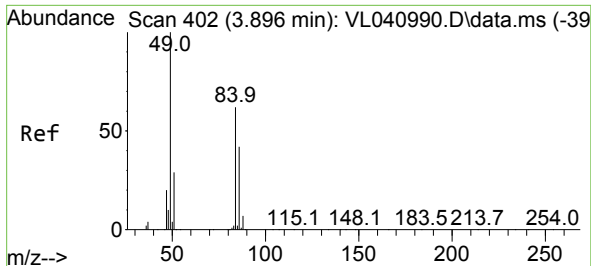
Tgt Ion: 45 Resp: 1219872

Ion Ratio Lower Upper

45 100

58 2.5 2.2 3.4





#20

Methylene Chloride

Concen: 35.901 ppbv

RT: 3.928 min Scan# 412

Delta R.T. 0.010 min

Lab File: VL041062.D

Acq: 9 Feb 2024 17:44

Instrument :

MSVOA_L

ClientSampleId :

IA2R

Tgt Ion: 84 Resp: 1919041

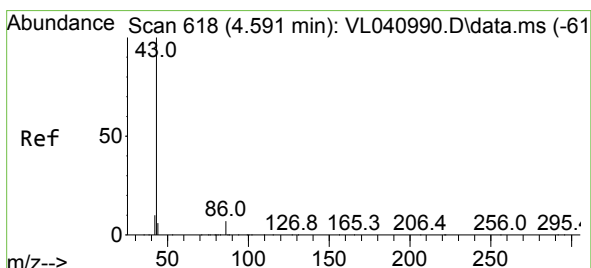
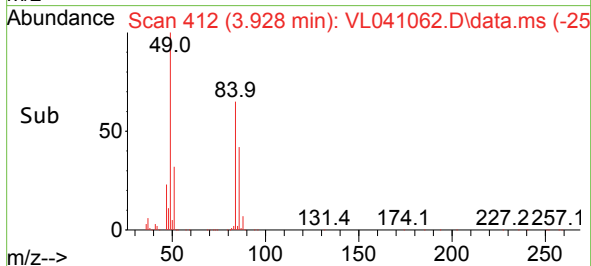
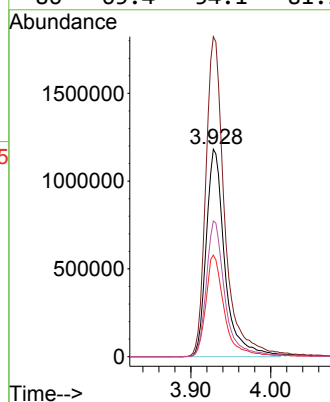
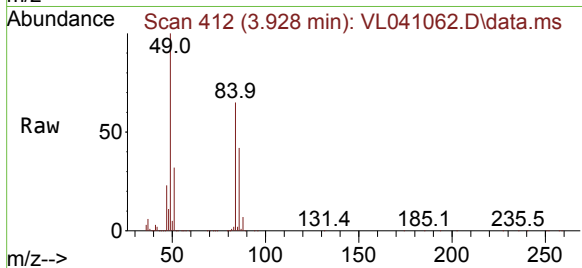
Ion Ratio Lower Upper

84 100

49 154.2 128.1 192.1

51 49.0 36.5 54.7

86 65.4 54.1 81.1



#23

Vinyl Acetate

Concen: 0.021 ppbv

RT: 4.632 min Scan# 631

Delta R.T. 0.019 min

Lab File: VL041062.D

Acq: 9 Feb 2024 17:44

Tgt Ion: 43 Resp: 2957

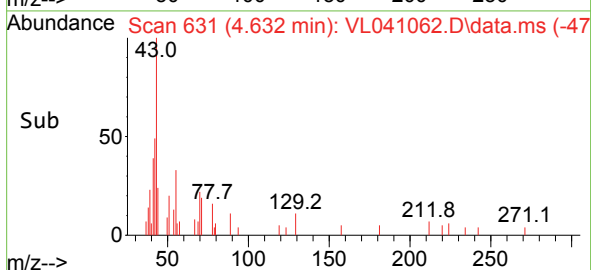
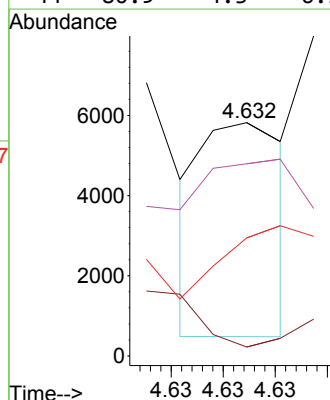
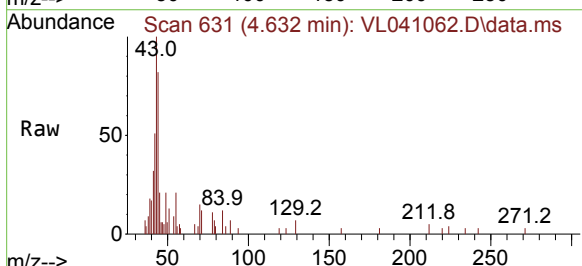
Ion Ratio Lower Upper

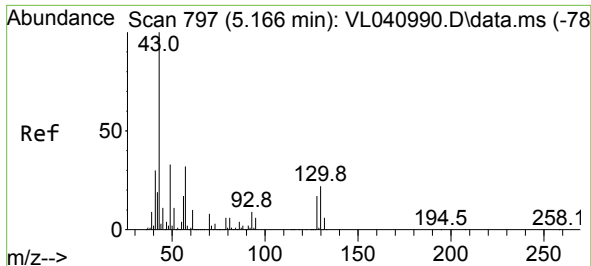
43 100

86 0.0 5.4 8.0#

42 107.6 8.6 13.0#

44 80.9 4.3 6.5#



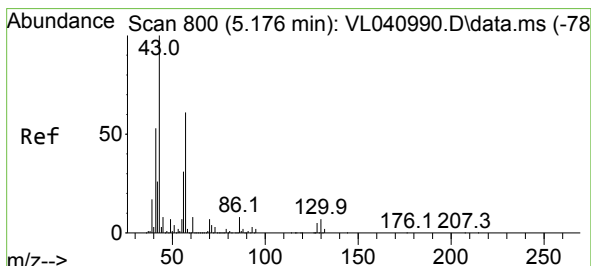
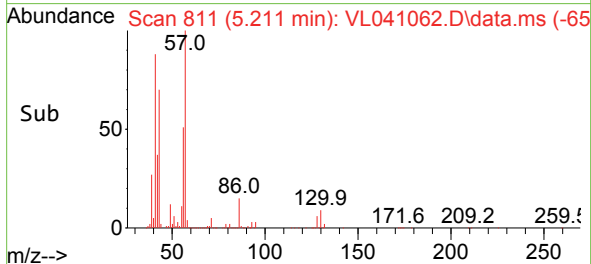
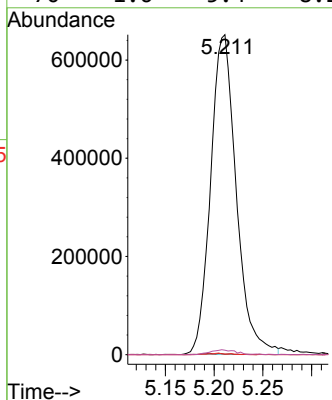
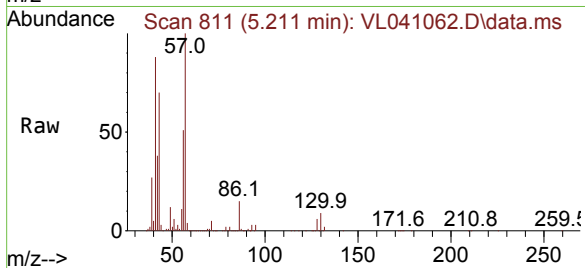


#25
Ethyl Acetate
Concen: 4.735 ppbv
RT: 5.211 min Scan# 811
Delta R.T. 0.019 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

Instrument :
MSVOA_L
ClientSampleId :
IA2R

Tgt Ion: 43 Resp: 1192774

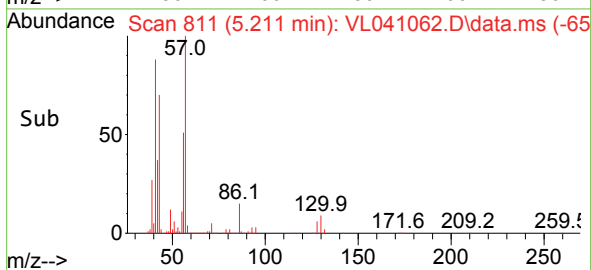
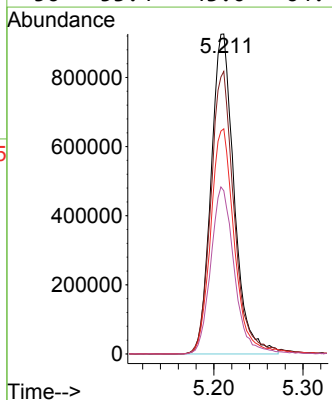
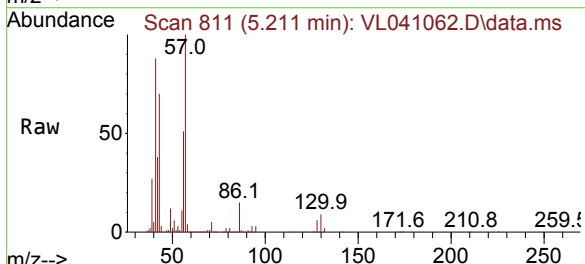
Ion	Ratio	Lower	Upper
43	100		
45	0.5	8.2	12.4#
61	0.4	7.9	11.9#
70	1.6	5.4	8.2#

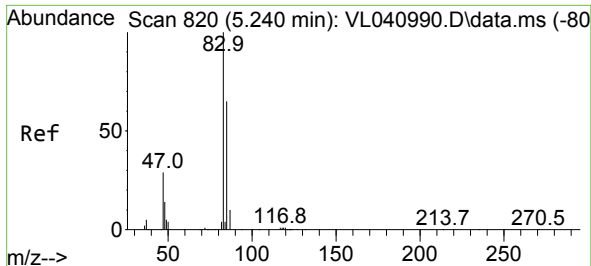


#26
Hexane
Concen: 15.570 ppbv
RT: 5.211 min Scan# 811
Delta R.T. 0.013 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

Tgt Ion: 57 Resp: 1671614

Ion	Ratio	Lower	Upper
57	100		
41	90.0	74.4	111.6
43	72.9	190.6	285.8#
56	53.4	43.0	64.4





#29

Chloroform

Concen: 0.207 ppbv

RT: 5.266 min Scan# 81

Delta R.T. 0.006 min

Lab File: VL041062.D

Acq: 9 Feb 2024 17:44

Instrument :

MSVOA_L

ClientSampleId :

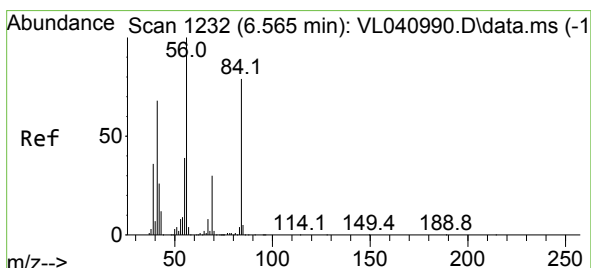
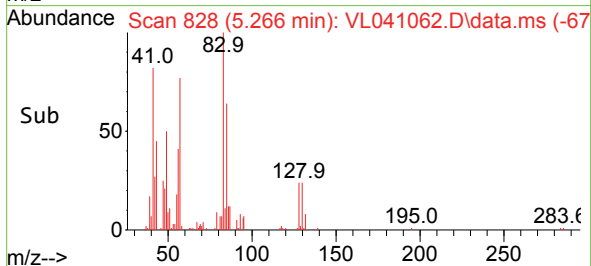
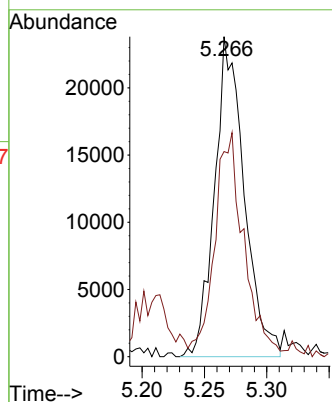
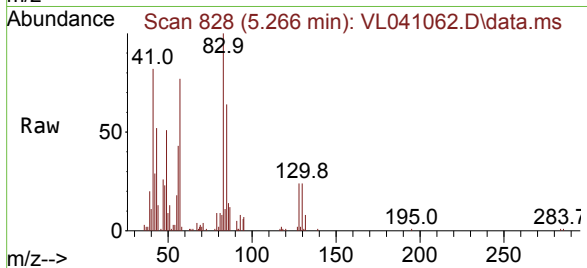
IA2R

Tgt Ion: 83 Resp: 39402

Ion Ratio Lower Upper

83 100

85 62.3 51.6 77.4



#30

Cyclohexane

Concen: 0.053 ppbv

RT: 6.594 min Scan# 1241

Delta R.T. 0.006 min

Lab File: VL041062.D

Acq: 9 Feb 2024 17:44

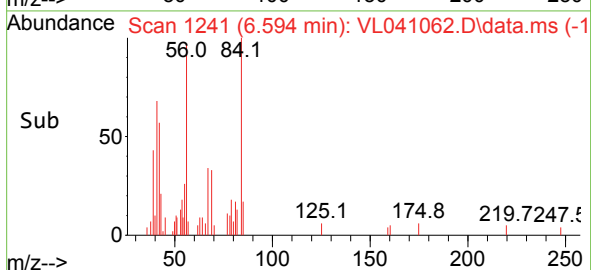
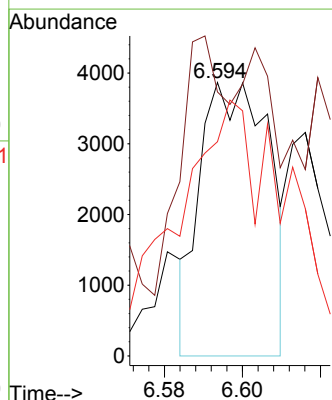
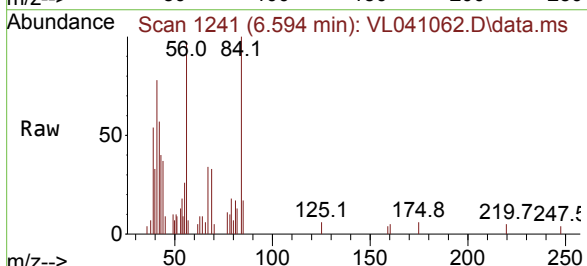
Tgt Ion: 84 Resp: 4749

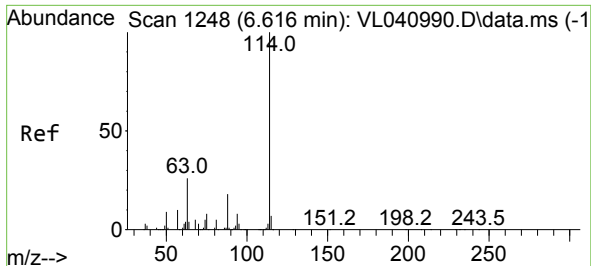
Ion Ratio Lower Upper

84 100

56 0.0 111.7 167.5#

41 178.9 71.0 106.6#

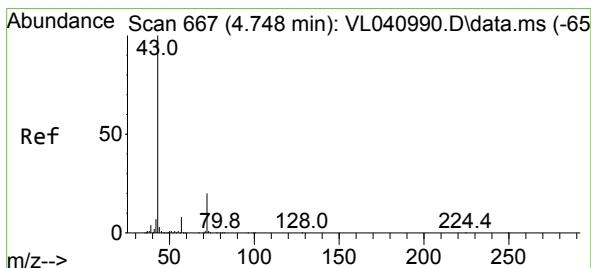
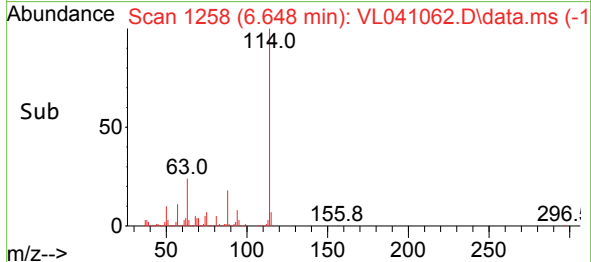
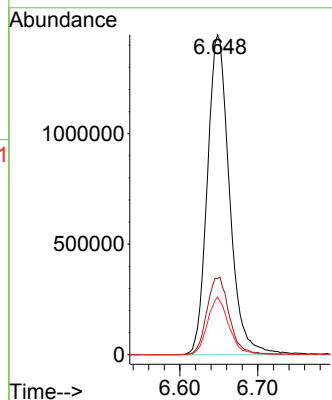
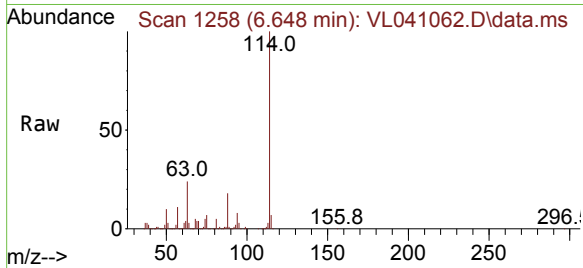




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.648 min Scan# 114
Delta R.T. 0.006 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

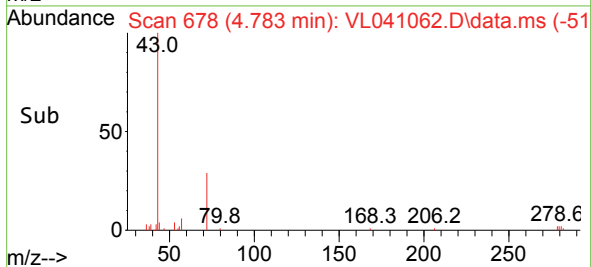
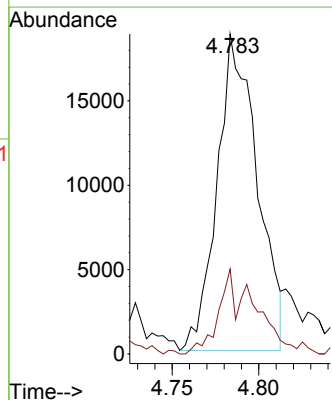
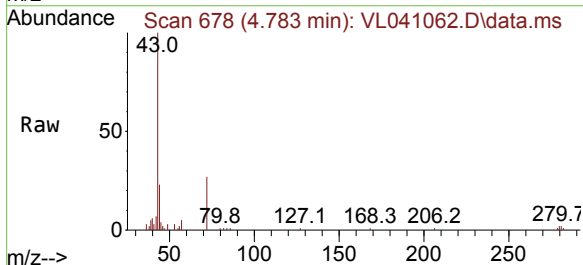
Instrument :
MSVOA_L
ClientSampleId :
IA2R

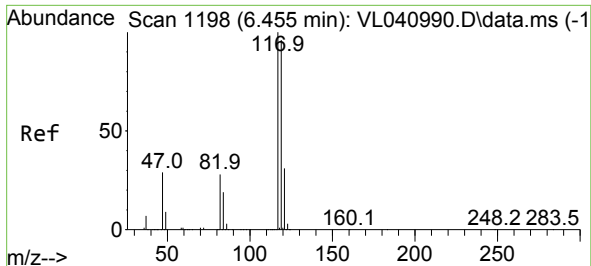
Tgt Ion:114 Resp: 2847311
Ion Ratio Lower Upper
114 100
63 24.8 20.8 31.2
88 17.5 14.3 21.5



#34
2-Butanone
Concen: 0.223 ppbv
RT: 4.783 min Scan# 678
Delta R.T. 0.013 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

Tgt Ion: 43 Resp: 30225
Ion Ratio Lower Upper
43 100
72 25.6 17.5 26.3

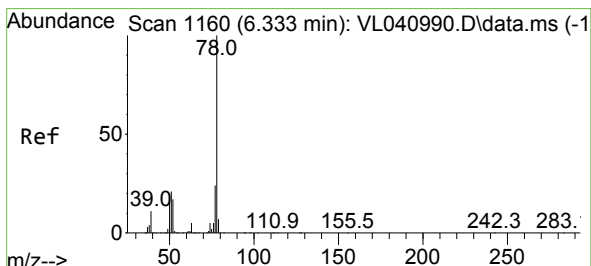
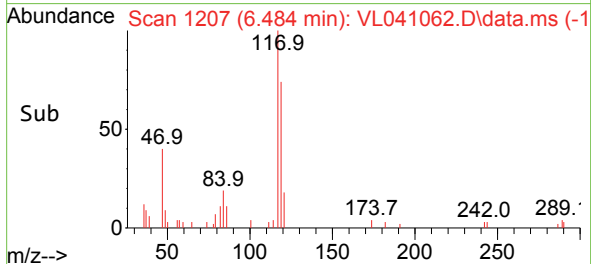
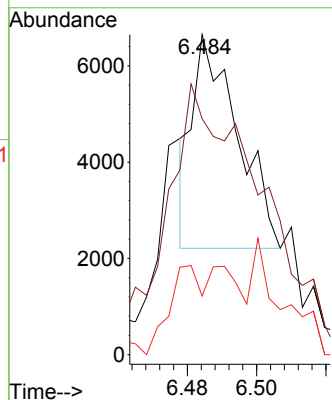
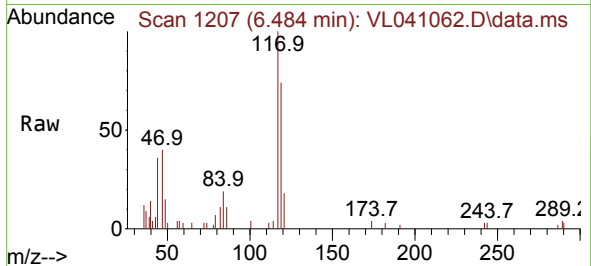




#35
Carbon Tetrachloride
Concen: 0.021 ppbv
RT: 6.484 min Scan# 1198
Delta R.T. 0.003 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

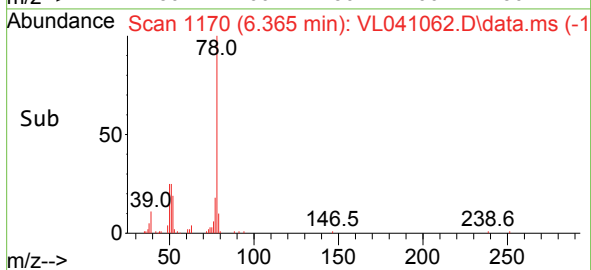
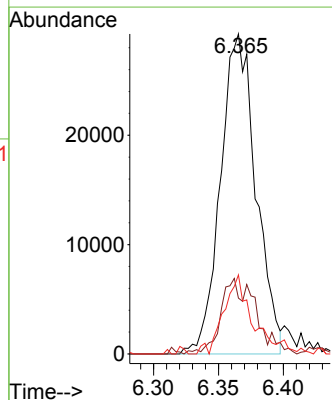
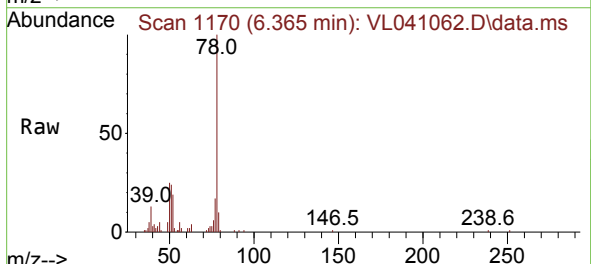
Instrument :
MSVOA_L
ClientSampleId :
IA2R

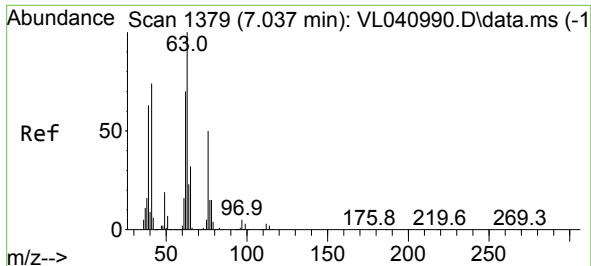
Tgt Ion:117 Resp: 3998
Ion Ratio Lower Upper
117 100
119 47.8 76.9 115.3#
121 6.3 24.7 37.1#



#36
Benzene
Concen: 0.236 ppbv
RT: 6.365 min Scan# 1170
Delta R.T. 0.006 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

Tgt Ion: 78 Resp: 55493
Ion Ratio Lower Upper
78 100
77 16.9 19.0 28.4#
50 22.4 15.8 23.6





#39

1,2-Dichloropropane

Concen: 7.465 ppbv

RT: 6.651 min Scan# 1

Delta R.T. -0.405 min

Lab File: VL041062.D

Acq: 9 Feb 2024 17:44

Instrument :

MSVOA_L

ClientSampleId :

IA2R

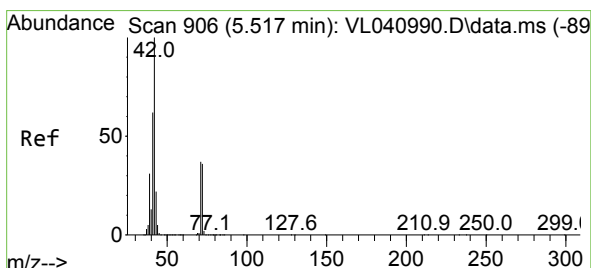
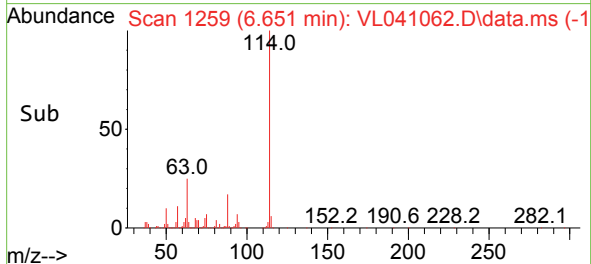
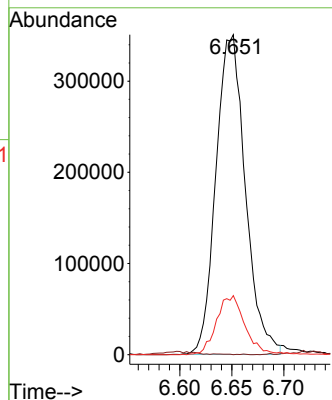
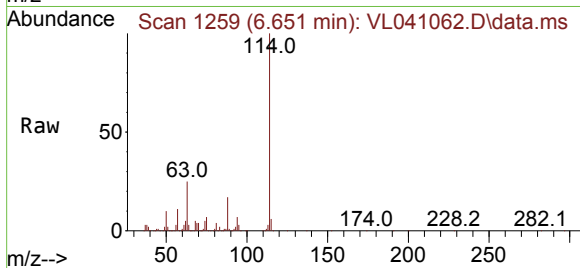
Tgt Ion: 63 Resp: 691571

Ion Ratio Lower Upper

63 100

41 0.0 59.6 89.4#

62 18.5 55.6 83.4#



#41

Tetrahydrofuran

Concen: 0.075 ppbv

RT: 5.259 min Scan# 826

Delta R.T. -0.280 min

Lab File: VL041062.D

Acq: 9 Feb 2024 17:44

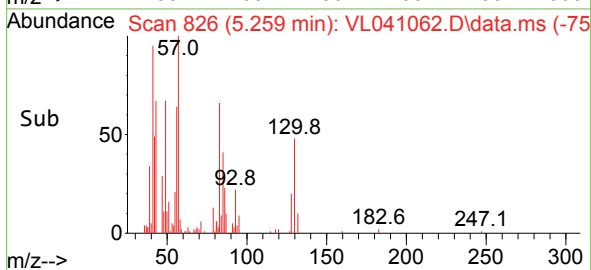
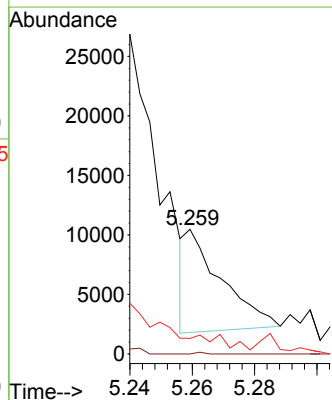
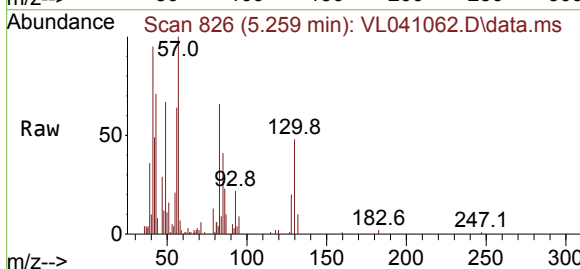
Tgt Ion: 42 Resp: 6891

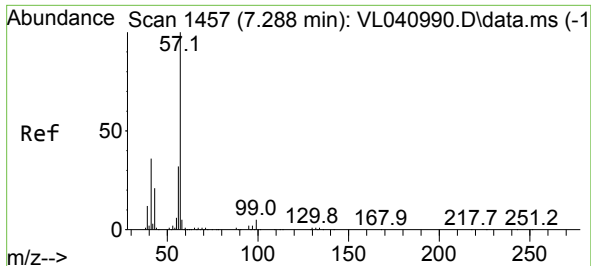
Ion Ratio Lower Upper

42 100

72 0.0 30.0 45.0#

71 0.0 29.5 44.3#

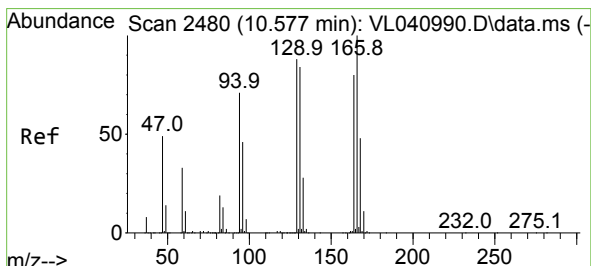
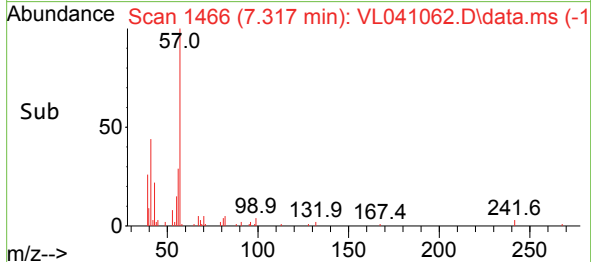
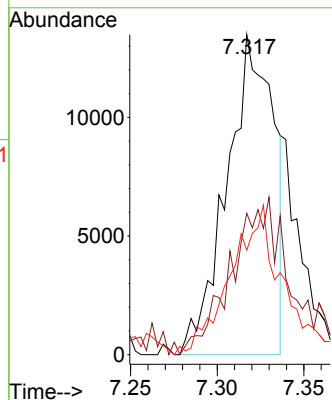
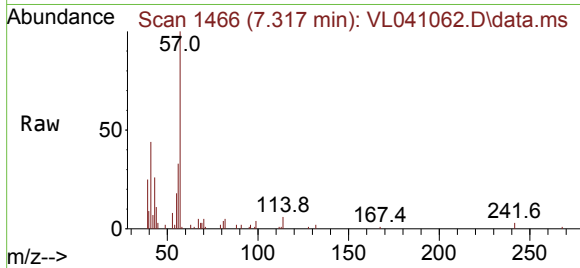




#44
2,2,4-Trimethylpentane
Concen: 0.064 ppbv
RT: 7.317 min Scan# 1457
Delta R.T. 0.003 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

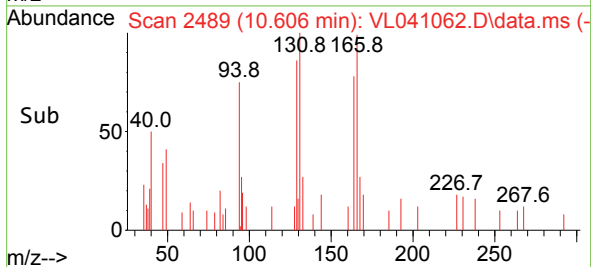
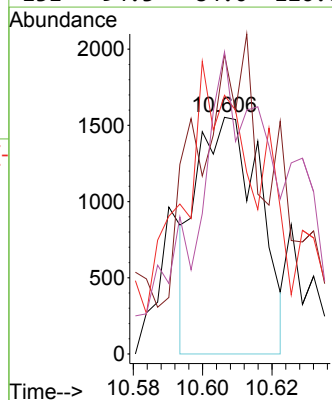
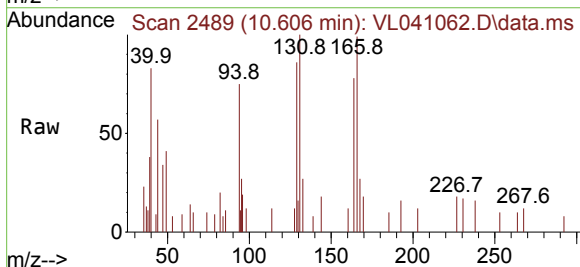
Instrument :
MSVOA_L
ClientSampleId :
IA2R

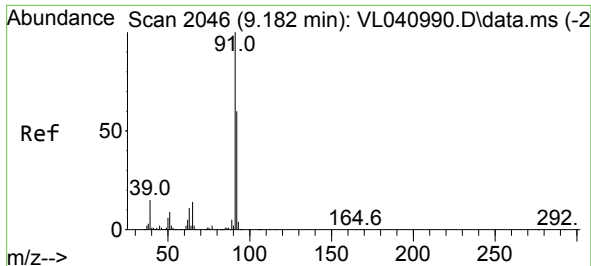
Tgt Ion: 57 Resp: 25251
Ion Ratio Lower Upper
57 100
41 68.1 28.6 43.0#
56 53.3 25.2 37.8#



#52
Tetrachloroethene
Concen: 0.025 ppbv
RT: 10.606 min Scan# 2489
Delta R.T. 0.003 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

Tgt Ion: 164 Resp: 1979
Ion Ratio Lower Upper
164 100
166 63.0 100.2 150.2#
129 91.4 87.9 131.9
131 94.3 84.0 126.0

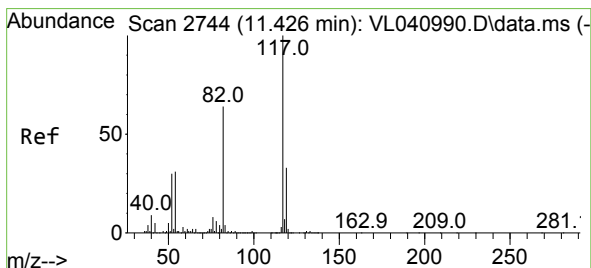
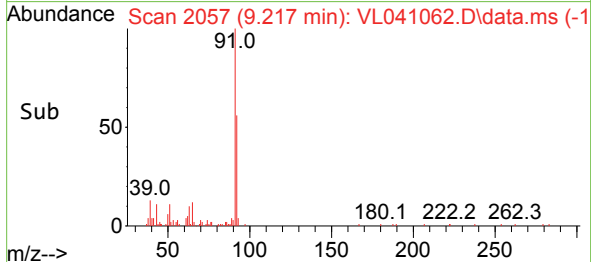
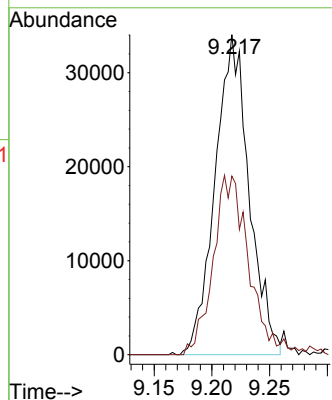
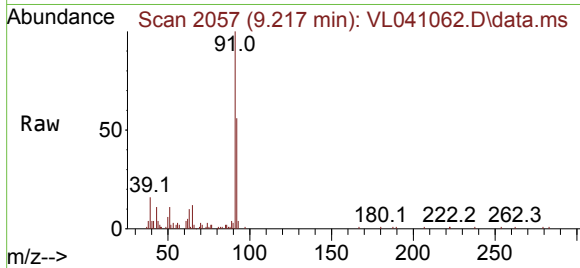




#53
Toluene
Concen: 0.271 ppbv
RT: 9.217 min Scan# 2046
Delta R.T. 0.010 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

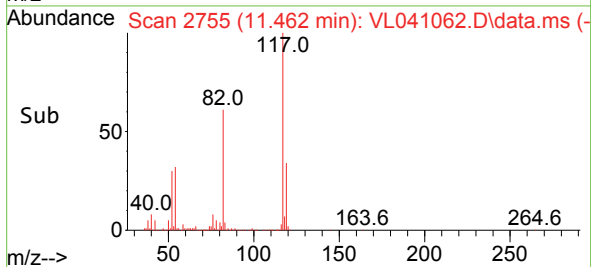
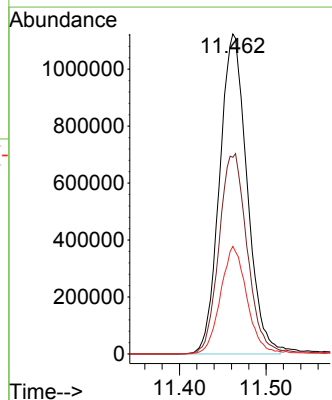
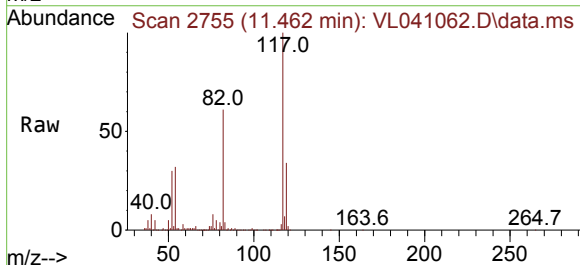
Instrument :
MSVOA_L
ClientSampleId :
IA2R

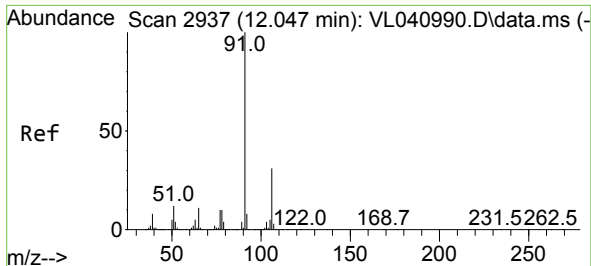
Tgt Ion: 91 Resp: 69809
Ion Ratio Lower Upper
91 100
92 59.7 48.6 72.8



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.462 min Scan# 2755
Delta R.T. 0.010 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

Tgt Ion: 117 Resp: 2474636
Ion Ratio Lower Upper
117 100
82 64.8 51.7 77.5
119 32.9 23.8 35.6

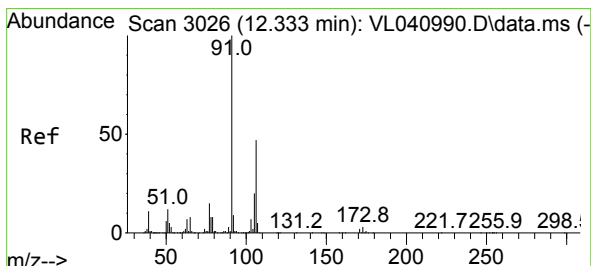
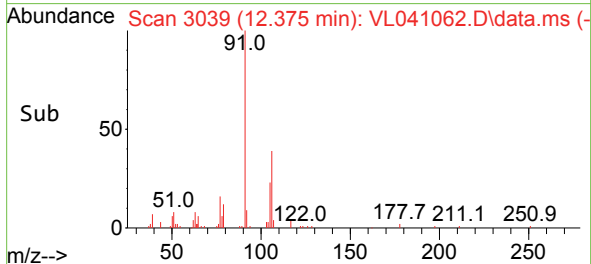
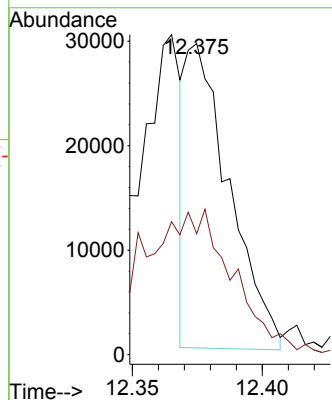
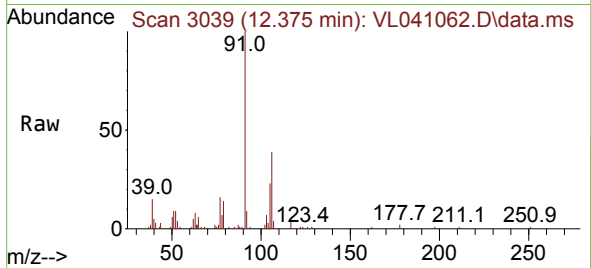




#58
Ethyl Benzene
Concen: 0.102 ppbv
RT: 12.375 min Scan# 3039
Delta R.T. 0.299 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

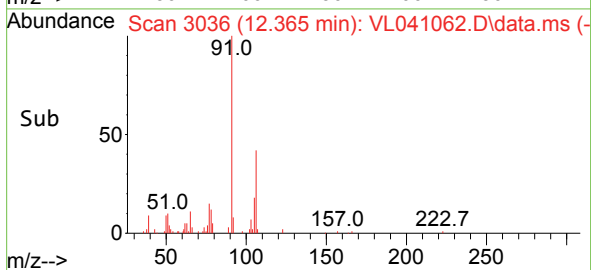
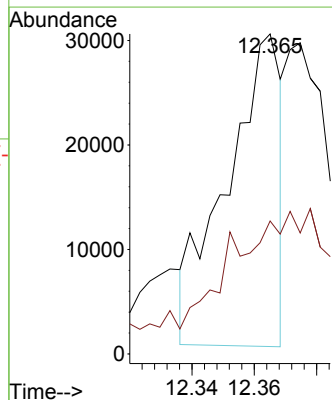
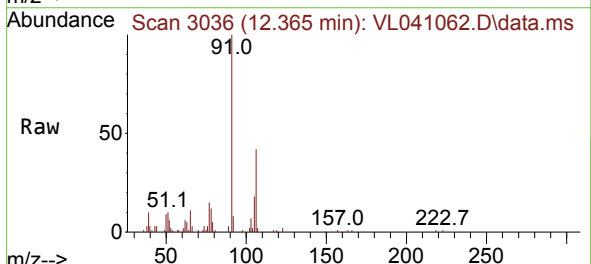
Instrument :
MSVOA_L
ClientSampleId :
IA2R

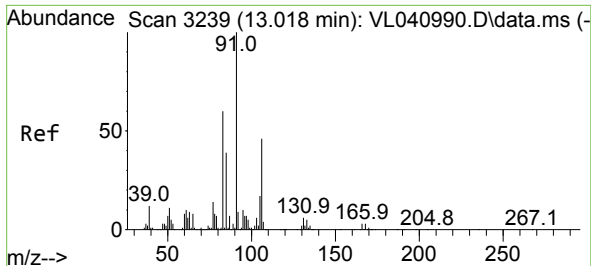
Tgt Ion: 91 Resp: 33965
Ion Ratio Lower Upper
91 100
106 34.3 24.8 37.2



#59
m/p-Xylene
Concen: 0.125 ppbv
RT: 12.365 min Scan# 3036
Delta R.T. 0.010 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

Tgt Ion: 91 Resp: 36098
Ion Ratio Lower Upper
91 100
106 0.0 34.9 52.3#

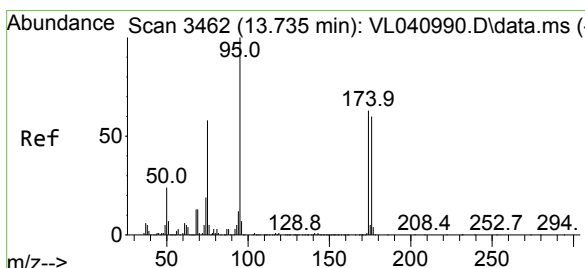
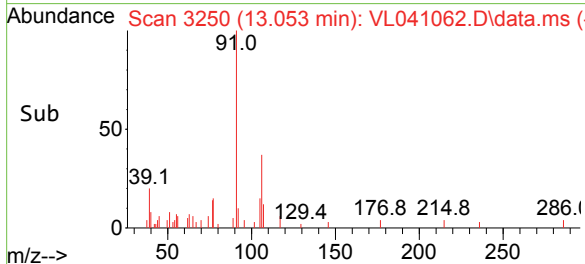
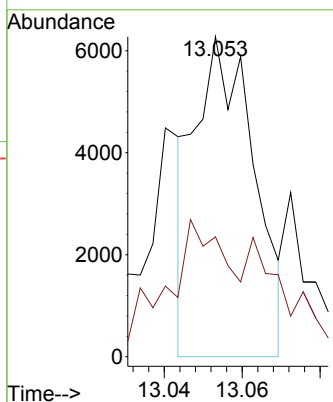
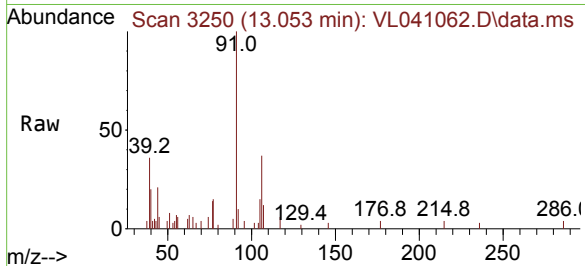




#60
o-Xylene
Concen: 0.024 ppbv
RT: 13.053 min Scan# 31
Delta R.T. 0.013 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

Instrument :
MSVOA_L
ClientSampleId :
IA2R

Tgt Ion: 91 Resp: 6610
Ion Ratio Lower Upper
91 100
106 82.4 22.6 67.7#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.278 ppbv
RT: 13.773 min Scan# 3474
Delta R.T. 0.013 min
Lab File: VL041062.D
Acq: 9 Feb 2024 17:44

Tgt Ion: 95 Resp: 1921102
Ion Ratio Lower Upper
95 100
174 62.4 49.1 73.7
175 4.6 3.7 5.5

